

<p>84-094116/15 SARAT UNIV MECHANIC 21.10.81-SU-379034 (07.07.83) C07c-15/46 C07c-67/48 C07c-69/65</p> <p>Stabilisation of styrene or methyl-methacrylate - improved by using imino-oxyl radical inhibitors</p>	<p>UYSA 21.10.81 *SU 1027-150-A</p>	<p>A(1-D3, 1-D10, 2-C)E(7-D5, 10-G2H, 10-J2B4)</p> <p>688</p>
<p>CH4-0-10065</p> <p>These inhibitors are used during purification, storage and transport of styrene and methyl methacrylate in circumstances where polymerisation is undesirable. They are based on cpds. of formula (I), where R is -NH-(CH₂)₆-NH- or gp. of formula (II). They are obtd. by the interaction of 2,2,6,6-tetramethyl-4-oxopiperidine-1-oxyl, 'TMPO', with hexamethylenedisocyanate, or dischloroanhydride of butylterephthalic acid e.g. 1.85 g hexamethylenedisocyanate in 10 ml of dry benzene are heated for 4 hrs. with 3.45 g TMPO in 40 ml. dry benzene, washed in hexane and the obtd. resin dissolved in 20 ml. nitromethane, chromatographed over aluminium oxide and eluted with nitromethane. The solvent is evapd. under lowered pressure and the residue recrystallised from a mixt. of ether and hexane. With concns. of inhibitor 0.5-2.0 x power minus 4 mol/l, polymerisation of styrene is retarded for 165-185 mins. compared with 73 mins. with the original inhibitor; polymerisation of methyl methacrylate is retarded for 650-686 mins. compared with 232 mins. Bul.25/7.7.83 (3pp Dwg.No.0/0)</p>	<div data-bbox="389 252 568 1008"> <p>(I)</p> </div> <div data-bbox="422 336 568 441"> <p>(II)</p> </div>	

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